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ALASKA
REVIEW OF SOCIAL AND ECONOMIC CONDITIONS

UNIVERSITY OF ALASKA, INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH, SEPT. 1984, VOL. XXI, No. 2

Prices and Incomes–Alaska and the U.S., 1980–1984

Introduction

Alaskans in the 1980s still pay more for nearly everything than other Americans. Prices in Alaska have always been high because of the state's geographic isolation, harsh climate, vast size, and related factors.[1] But not everything is uniformly more expensive in Alaska; how much more Alaskans pay depends on what they buy and where they live.

While prices in Anchorage and the state's other urban places are higher than the U.S. average, they are the lowest in Alaska. And price differences between Anchorage and other U.S. cities vary substantially by item. Costs of renting an apartment, for instance, may be twice as high in Anchorage as in most other U.S. communities, while costs of food may be only 10 percent higher. Bush Alaskans, especially those in the western and northern regions of the state, commonly pay twice as much or more for many items as urban Alaskans do.

Even though we know that prices are generally higher in Alaska, there is much we do not know about overall differences in living costs between Alaska and other states and within Alaska itself. The most detailed information on prices in Alaska is for the city of Anchorage, where the federal government began collecting such information in the 1960s. But even this price information has shortcomings, as we discuss later. Outside Anchorage, information on prices of most items has not been systematically collected over time.

The first part of this *Review* examines price differences within Alaska, and between Alaska and other states, based on figures from the U.S. Bureau of Labor Statistics, the 1980 U.S. census, and various other sources.

Alaska is known not only for its high costs, but also for its high incomes. But the high income figures mask the large differences in income that exist around the state; incomes are generally lowest in rural places where prices are highest. And the state's higher living costs mean that Alaskans need more money than other Americans do to buy the same kinds of food, houses, and other items.

The second part of the *Review* compares Alaskans' buying power with that of other Americans, and looks at how incomes differ within Alaska. We also report on wages Alaskans in various occupations were earning at the time of the 1980 census, and on differences the census found in earnings of Alaska men and women. Our main sources of information on incomes are the U.S. Bureau of Economic Analysis and the 1980 U.S. census. Although this census information is now several years old, much of it has only recently been published by the census bureau, and in many cases it is the best information available.

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[1] In the October 1974 *Alaska Review of Social and Economic Conditions*, economists Arlon Tussing and Monica Thomas cite several possible causes for Alaska's high prices, including but not limited to, transportation costs to and within the state; high costs of construction in Alaska; uncertainties and delays in shipping and construction due to the state's harsh climate; small Alaska markets; seasonal fluctuations in production and sales in many Alaska industries; and rapid changes in industry and government activity which in the past have alternatively created shortages and oversupplies of goods in the state.

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FEATURE

Linda Leask — Prices and Incomes—Alaska and the U.S., 1980-1984

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Prices, Alaska and the U.S.

This is the state of our information about living costs in Alaska in 1984:

- The only Alaska community for which there is a long-term record of prices and price changes is Anchorage. We have some information on prices in other Alaska communities, but there is no standard, periodic record of broad price changes outside Anchorage.
- The Anchorage consumer price index, the measure most often used to gauge price inflation in Alaska, may not have accurately recorded overall price changes in Anchorage between 1980 and 1982. The reasons for this possible inaccuracy are discussed elsewhere.[2] The important point here is that although the Anchorage index has more accurately measured inflation since early 1982, the questionable figures for the 1980-1982 period have not been verified or corrected if necessary—which means that the current Anchorage index figures may still not be accurate.
- The only series that compared overall living costs in Alaska and in other states—the federal government's annual family budgets for Anchorage and other U.S. cities—was discontinued in 1981.
- Several state agencies and the University of Alaska have studied cost differences among Alaska communities within the past 10 years—but there have been substantial disagreements in the cost differences reported in these studies.

[2]See Scott Goldsmith and Phillip Rowe, "The Anchorage Consumer Price Index—How Accurate?," *Research Summary* No. 14, January 1984, Institute of Social and Economic Research.

Measuring Living Costs

There is no true "cost-of-living" index in the United States. Such an index would continuously monitor changes in American spending habits. If, for instance, the price of hamburger doubled overnight and Americans began buying more chicken instead, the index would immediately take that shift into account. What we actually have are indexes that measure price changes for the specific groups of items—often referred to as "market baskets"—included in the indexes. Such indexes measure changes in the costs of living only to the extent that they include the kinds of things Americans actually buy.

The best-known and most widely used measures

of price changes in the U.S. are the national and city consumer price indexes published by the federal Bureau of Labor Statistics. Anchorage is one of the cities for which price indexes are published. These indexes record changes over time in prices of specific kinds and amounts of food, clothes, housing, medical care, and other items. The bureau decides what to include in the price indexes by making periodic surveys of how Americans spend their money. Such a survey is going on now; the previous one was made in the 1970s.

The national price index records price changes in the country as a whole since 1967, the base year for the index. The city indexes measure price changes in individual places since 1967. This means that *none of the indexes can be compared to show differences in prices between places*—each index is based on prices in a particular place in 1967. The only comparison we can make between indexes is a comparison of *the rates of increase of prices* in various places. We can—as we do later—examine whether prices have risen faster or slower in Anchorage than in the country as a whole since 1967.

A second kind of index issued by the Bureau of Labor Statistics between 1967 and 1981 did allow us to compare cost differences among various U.S. locations. The bureau's annual family budgets showed the incomes necessary for a hypothetical family of four to maintain a high, a moderate, and a low standard of living in 40 U.S. cities, including Anchorage. The kinds and amounts of items included in the budgets were based partly on nutritional and other standards developed by the federal government, and partly on surveys, done in the 1960s, on how American families spent their money. The budgets also included personal taxes the family would have to pay at different income levels.

Some Alaska economists believe that the budgets may have underestimated the incomes necessary for Anchorage families, because they did not include certain kinds of costs that are generally higher for Alaskans than for other Americans. For example, the budgets did not include costs of air fares; most travel between Alaska and the lower 48 is of necessity by air, while other Americans have the options of driving interstate. Also, since the items included in the budgets were based on 1960s information about American buying habits, many economists believed that by the 1980s the budgets needed substantial updating.

Still, the budgets at least offered a measure of the comparative costs of buying the same goods and services in different areas of the country. The bureau discontinued the series in 1981, reporting that it could not afford to make necessary revisions in the budgets.

Anchorage and U.S. Consumer Price Indexes[3]

The Anchorage consumer price index is important to Alaskans because it provides the only long-term record of price changes in the state.[4] (In fact, the 1984 Alaska Legislature considered a bill that would tie increases in the state spending limit to increases in the Anchorage index.[5]) This index is also the only gauge of how inflation in Alaska compares with inflation elsewhere in the country. This comparative measure of inflation is particularly valuable now, because with the end of the federal family budget series in 1981, there is no current measure of overall cost differences between Alaska and other states. By recording whether prices are rising faster or slower in Anchorage than in the U.S. as a whole, the Anchorage index at least indicates whether the price gap between Alaska and the rest of the country is widening or narrowing.

Unfortunately, recent ISER research has shown that the Anchorage index may not have accurately recorded overall price changes in Anchorage between 1980 and 1982. During that period the Bureau of Labor Statistics did not use Anchorage information to calculate changes in Anchorage homeowners' costs, but instead substituted information on homeowners' costs in other western cities.[6] Because homeowners' costs are the largest single item in the index, changes in those costs seriously affect the overall index.

We believe that the bureau's use of housing costs from other cities in the Anchorage index may have caused the overall inflation rate in Anchorage to have been overestimated in 1980 and underestimated in 1981 and 1982. The precise effect of this practice is uncertain.

At the end of 1982, the bureau changed its method of measuring changes in homeowners' costs—not because of the problem with the Anchorage

[3]Since 1978 there have been two versions of the consumer price indexes: the wage earners and clerical workers index and the all-urban consumers index. Movements of the two have been very close. Our discussions of the price index changes in recent years are based on the all-urban consumers index.

[4]The Bureau of Labor Statistics did issue a Fairbanks consumer price index in the late 1970s and the beginning of the 1980s, but it has been discontinued.

[5]In 1982, Alaska voters approved a state spending limit that ties increases in the state budget to increases in population and prices. The 1984 Alaska Legislature considered but did not pass House Bill No. 524 which would have linked increases in the spending limit to increases in the Anchorage consumer price index.

[6]See Goldsmith and Rowe, cited in note 2.

index, but for national reasons. As a result of the change, the bureau once again began using Anchorage figures to calculate changes in Anchorage homeowners' costs. So we believe that since 1982 the index has more accurately measured changes in both homeowners' costs and overall index costs. However, because the 1980-1982 figures have not been corrected, the current Anchorage index figures—which measure overall price changes from 1967 to the present—may still not be accurate.

1984 Indexes

In January 1984, the Anchorage consumer price index stood at 271.5 and the U.S. city average index at 305.2 (Table 1). According to these figures , prices from 1967 through early 1984 *increased 205 percent nationally and 171 percent in Anchorage—or about 20 percent more nationally than in Anchorage.*

It is in housing costs that we find the big difference between the Anchorage and the national indexes. *Overall costs of housing in the U.S. increased 229 percent between 1967 and the start of 1984, as compared with an increase of only 168 percent in housing costs recorded by the Anchorage index.* Total housing costs are divided into three kinds of costs: shelter, utility, and household operations costs. The most important of these is shelter costs—the costs of buying and renting homes. This is where we find the main difference between Anchorage and the national average in growth of housing costs. Shelter costs across the country increased 253 percent from 1967 through early 1984, as compared with a record increase of 149 percent in Anchorage.

These figures tell us that shelter costs increased 70 percent more nationally than in Anchorage during the past 16 years. Since home-buying costs make up most of the shelter costs, we know that it is specifically these costs that have grown much slower in Anchorage than they have nationwide.[7]

While we know that slower growth in housing costs had become an established trend in Anchorage before 1980, we do not know whether the gap between Anchorage and the U.S. housing indexes would be as wide if proper Anchorage data had been used between 1980 and 1982 instead of out-of-state data.

In addition, the overall inflation rates recorded by the two indexes would be much closer were it not for the very significant difference between the Anchorage and the U.S. shelter indexes. *Excluding shelter costs, prices of all items rose 188 percent in Anchorage and 190 percent nationally between 1967 and January 1984* (Table 1). Prices of clothes, medical care, and entertainment increased somewhat more in Anchorage than in the country as a whole since 1967, while prices of food, transportation, and miscellaneous items increased more nationally.

From January 1983 through January 1984, prices of all items in the price index rose 5.4 percent in Anchorage and 4.1 percent nationally. Costs of housing in Anchorage rose substantially faster than the national rate during that period. *Thus, in 1983, for the first time since the pipeline construction boom of the mid-1970s, prices in Anchorage rose faster than prices elsewhere in the country.*

Long-Term Trends

Figures 1 and 2 offer two ways of looking at long-term trends of the consumer price indexes for Anchorage and the country as a whole.

Figure 1 shows annual rates of increase in the overall indexes and in some individual items.

TABLE 1

U.S. City Average and Anchorage Consumer Price Indexes for All Urban Consumers, January 1984
(1967 = 100, except as noted)

	Anchorage		U.S.	
	Index	% Incr. from Jan. '83	Index	% Incr. from Jan. '83
All Items	271.5	5.4%	305.2	4.1
Food	272.9	4.4	299.4	3.9
Housing	268.5	6.8	329.2	3.6
Shelter	249.2	8.7	353.2	4.4
Renters' costs*	110.5	7.6	105.7	4.9
Rent (residential)	247.2	8.2	242.9	4.6
Homeowners' costs*	107.7	9.6	104.9	4.2
Fuel & other utilities	257.3	11.4	376.0	2.9
Furnishings & operation	320.7	–.2	240.4	2.0
Apparel & upkeep	200.1	5.3	196.4	2.8
Transportation	277.7	4.2	306.0	4.4
Medical Care	373.7	4.7	369.5	6.2
Medical care services	410.0	4.7	400.2	6.0
Entertainment	263.2	2.9	249.9	3.5
Other Goods & Services	260.2	5.3	300.5	7.4
All Items Less Shelter	287.9	4.2	289.8	4.1

*November 1982 = 100.

Source: U.S. Bureau of Labor Statistics.

[7] Anchorage rental costs, on the other hand, have actually increased faster than the national average.

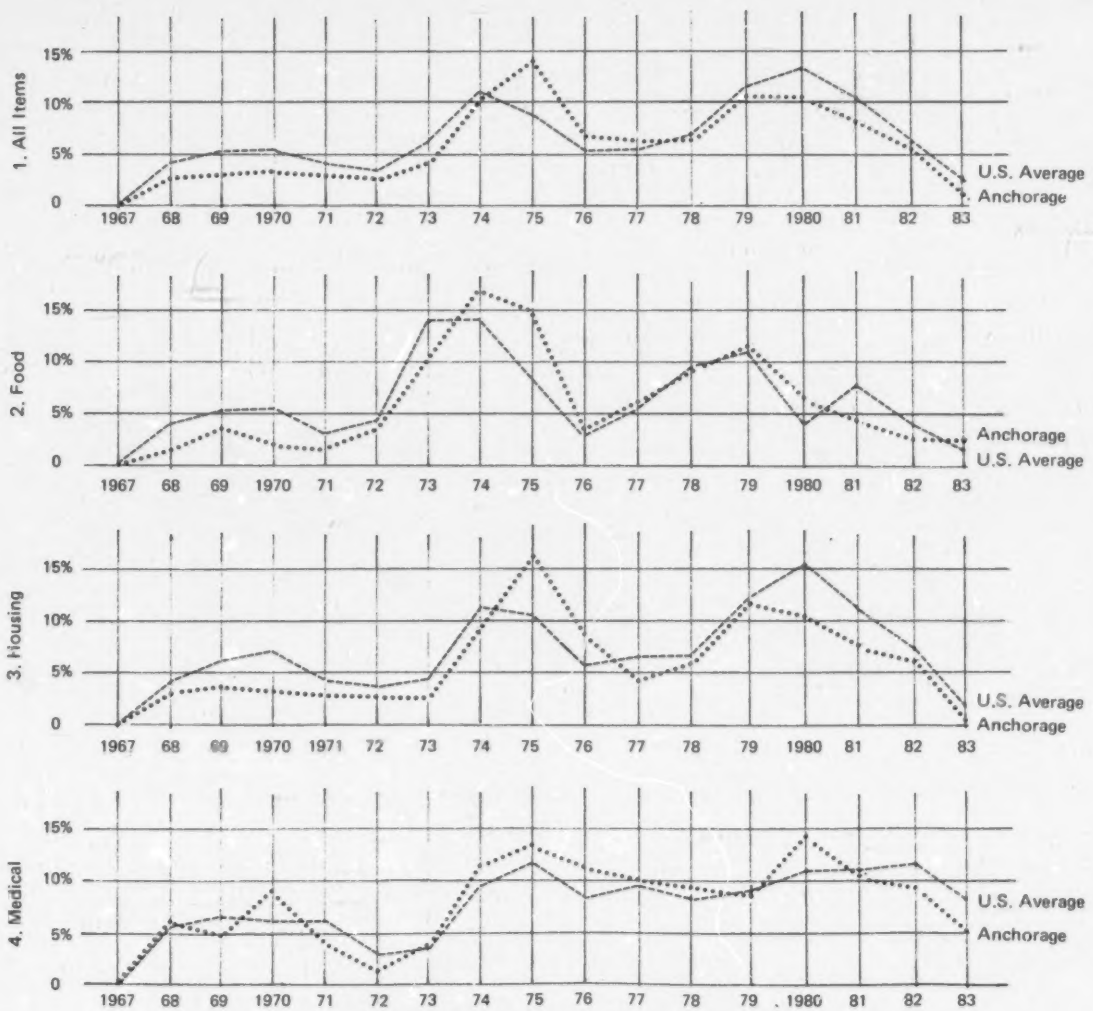

Figure 1. Annual Rates of Increase of Consumer Price Indexes, Anchorage and U.S. Urban Average, 1967-1983

Source: U.S. Bureau of Labor Statistics, U.S. urban average consumer price index and Anchorage consumer price index, 1967-1983.

Throughout the late 1960s and early 1970s, prices in Anchorage rose less than the national average. While national inflation was running between 3 and 5 percent annually during that period, Anchorage prices rose between 1.5 and 3 percent each year.

Economists cite several possible explanations of Anchorage's lower inflation during those years, including growth in the city's population (which created larger markets and allowed local businesses to take advantage of economies of scale) and development of cheaper methods of transporting goods from the lower 48.

Construction of the trans-Alaska pipeline, beginning in 1974, created an economic boom for the next 3 years. Between 1974 and 1976, prices in Anchorage for the first time increased faster than the

national average—and this during a period when inflation across the country had sharply increased. Between 1974 and 1975, prices of all items in the index increased nearly 15 percent in Anchorage as compared with about 9 percent in the country as a whole.

Although the causes of Anchorage's high inflation during that period are not entirely clear, a rapidly growing population and the resulting sharp increase in demand for many items, combined with high pipeline-related wages, were important factors. Renters were perhaps hardest hit by the big increase in population; many more people looking for apartments to rent created a very low vacancy rate, and rents climbed.

After the pipeline was completed in 1977, growth of prices in Anchorage once again fell below the national average. Anchorage saw an economic slowdown in the late 1970s; the city's population dropped; and demand for houses and apartments declined.

By the end of the decade, national inflation was very high, hitting about 13 percent in 1980. The main item pushing up the overall index was housing costs. Interest rates on home mortgage loans were at record highs. Inflation in Anchorage was also high in 1979 and 1980, but still below the national rate. In the early 1980s, inflation recorded by the Anchorage index was significantly below the national rate. However, this was the period during which the Bureau of Labor Statistics used out-of-state data to reflect changes in Anchorage homeowners' costs.

Figure 2 provides another way of looking at long-term trends in the price indexes; the graphs in this figure show overall growth in the Anchorage and U.S. indexes and in some individual index items from 1967 through 1983. Costs of all items in both Anchorage and the country as a whole have grown sharply since 1967, but overall price growth in Anchorage has been somewhat lower.

The fastest-growing costs in the past 16 years have been medical costs, which have increased nearly 300 percent in Anchorage and nationally. Housing costs, as shown in Figure 2, grew substantially more around the country than in Anchorage—but notice that growth in housing costs in Anchorage and the entire U.S. tracked much more closely before 1980, when the Bureau of Labor Statistics began using out-of-state data to calculate Anchorage homeowners' costs.

Annual Family Budgets, Anchorage and U.S.

From 1967 through 1981, the federal Bureau of Labor Statistics published annual family budgets that compared costs for a family of four to maintain three standards of living in 40 cities around the country, including Anchorage. These budgets did not report what families in Anchorage and other cities actually spent for food, housing, and other items. They showed comparative costs of buying a specific group of goods and services—a "market basket"—at each standard in various cities.

Table 2 shows the last in the series, the 1981 budgets for Anchorage and the U.S. average. *In 1981, costs of maintaining the three standards of living in Anchorage ranged from 20 to 50 percent above the national averages. Housing, personal income taxes, and medical care were the three most expensive budget items, relative to U.S. averages.*

In 1981, the bureau estimated it would cost more than $45,000 for a family of four to maintain a high standard of living in Anchorage—about 19 percent more than the $38,000 required to maintain the same standard in the average U.S. city. A family at a moderate standard of living in Anchorage in 1981 needed $32,000, or 26 percent more than the $25,000 required for a moderate standard elsewhere in the country. But it was at the low standard that the cost difference was greatest. To maintain a low standard of living in 1981, an Anchorage family of four needed almost $23,000, 50 percent more than the $15,000 needed to sustain the same standard in other cities. A look at the three costliest budget items—housing, medical care, and income taxes—tells us why the burden of Anchorage's high costs are heaviest on poorer families.

Housing Costs. *Anchorage housing costs were 35 percent above the national average at the high standard of living in 1981, 42 percent higher at the intermediate standard, and 95 percent higher at the low standard.* This huge difference exists at the low standard because all families at that standard are assumed to rent rather than own homes. Long-term trends in the consumer price indexes show that costs of owning homes did not increase as much in Anchorage as they did nationally during the 1970s. But although the difference in housing costs between Anchorage and average U.S. cities is not as large as it once was, Anchorage homes are still substantially more expensive, and rents in Anchorage remain very high relative to the national average.

Medical Costs. Medical care was another Anchorage budget item that cost far more than the national average in 1981. *Costs of medical expenses included in the Anchorage budgets at all three standards were 60 percent higher than the national average in 1981.* But these high costs were hardest on the low-income Anchorage family, because the budgets assumed that a family at any standard of living would

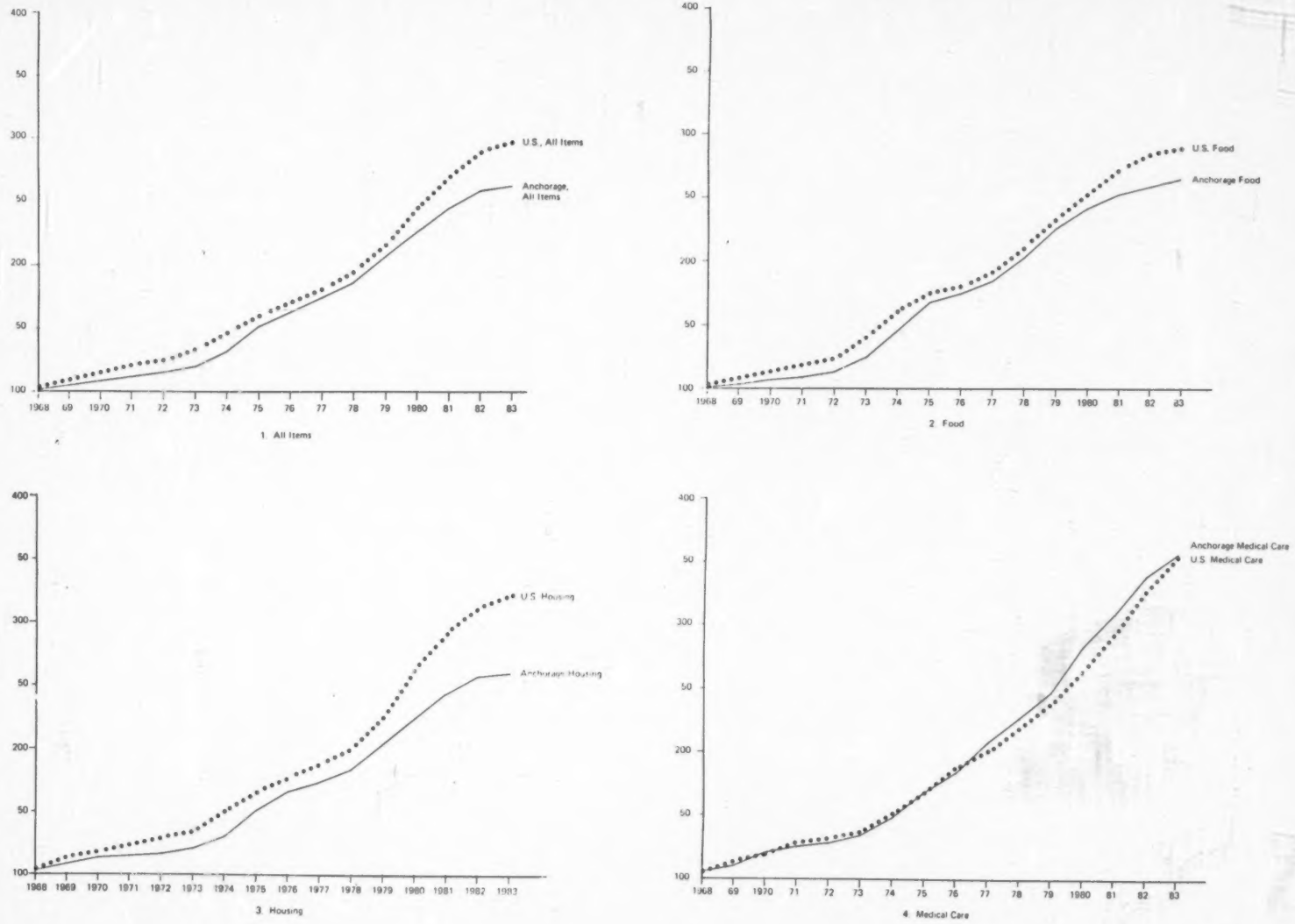

Figure 2. Growth in the Anchorage and U.S. Average Consumer Price Indexes, 1967-1983
(1967 = 100)

TABLE 2

Anchorage and U.S. Urban Average Budgets for a Four-Person Family at Three Standards of Living, Autumn 1981

		1 High Standard of Living	2 Anchorage/ U.S. Ratio	3 Intermediate Standard of Living	4 Anchorage/ U.S. Ratio	5 Low Standard of Living	6 Anchorage/ U.S. Ratio
Total Budget[a]	Anchorage	$45,119	119	$31,890	126	$22,939	150
	U.S.	38,060	100	25,407	100	15,323	100
Food	Anchorage	8,077	110	6,586	113	5,377	118
	U.S.	7,366	100	5,843	100	4,545	100
Housing	Anchorage	11,380	135	7,865	142	5,492	195
	U.S.	8,423	100	5,546	100	2,817	100
Transportation	Anchorage	3,484	113	2,949	124	2,198	168
	U.S.	3,075	100	2,372	100	1,740	100
Clothing	Anchorage	2,096	108	1,541	116	1,124	120
	U.S.	1,947	100	1,333	100	937	100
Medical Care	Anchorage	2,388	159	2,308	160	2,304	160
	U.S.	1,505	100	1,443	100	1,436	100
Personal Income Taxes[b]	Anchorage	10,565	113	5,491	124	2,924	183
	U.S.	9,340	100	4,443	100	1,596	100

[a]Some budget categories have been omitted here; therefore, costs of categories included will not total overall budget costs.

[b]Personal income tax category includes federal, state, and local income tax payments for the U.S.; in Anchorage in 1981 the only income taxes residents paid were federal.

Source: U.S. Bureau of Labor Statistics.

require essentially the same amount of medical care. Therefore, the family with an income of $23,000 was assumed to pay as much for medical care as a family with an income of $45,000. [8]

Medical costs in the budgets include personal payments for health insurance, and for expenses not covered by insurance at the time the budgets were developed in the 1960s. These noncovered items include part of the cost of visits to doctors and dentists, prescription drugs, and other items. Such expenses may have no longer represented typical family medical costs by 1981, since in recent years health insurance has covered more kinds of medical costs. Still, the figures do indicate that medical costs—whether paid for by insurance companies or

[8]The budgets assumed that the family at the low standard, while having a smaller income than families at the other standards, paid its own medical costs and did not qualify for help under government programs.

individuals—are much higher in Anchorage than in the country as a whole. (Table 19 provides another measure of medical costs in Alaska.)

Income Taxes. A third costly item in the Anchorage budgets for 1981 was personal income taxes. Anchorage families at all three standards paid substantially more in personal income taxes than did their counterparts in the average U.S. city. As Table 2 shows, *Anchorage families at the high, moderate, and low standards, respectively, paid 13 percent, 24 percent, and 83 percent more in personal income taxes in 1981 than did families at the same standards in other cities.* These differences are particularly striking because the Anchorage figures include only federal income taxes—there were no state or local income taxes in Anchorage that year—while the national figures include state and local as well as federal tax payments.

Federal income taxes hit Alaskans hard because the progressive tax system, under which higher incomes are taxed at a higher rate, does not take into account Alaska's higher living costs. Thus, an Alaska family with an income of about $32,000 in 1981 was taxed at a higher rate than a typical U.S. family with an income of $25,000, although the two incomes were roughly equivalent in buying power.

Although this system affects all Alaska families, it is especially hard on low-income families. This is true because the income needed to maintain a low standard of living in Alaska is so much larger than that needed to maintain the same low standard in other U.S. cities. As Table 2 shows, Anchorage families at the low standard of living in 1981 needed an income 50 percent higher than their counterparts in the lower 48; families at the moderate standard in Anchorage needed an income about 26 percent higher than their equivalent in other cities; and families at the high standard in Anchorage needed an income about 20 percent higher than elsewhere.

Table 3 illustrates the effects of the federal tax system; it shows what percentages of their incomes families paid in 1981 federal income taxes at the three standards of living in Anchorage and in the U.S. as a whole. At the high standard of living, the Anchorage family spent 23.4 percent of its budget for federal taxes, as compared with 20.1 percent for families in the U.S. as a whole. At the moderate standard, the Anchorage family paid 17.2 percent of its budget in federal taxes, as compared with 14.1 percent by its U.S. counterpart. And at the low standard, the Anchorage family paid 12.7 percent of its income for federal taxes, as compared with 8.4 percent for families at the same standard elsewhere.

Notice that the Anchorage family at the lowest standard of living carried the highest relative tax burden—51 percent more than its average U.S. counterpart.

Aside from costs of housing, taxes, and medical care, other kinds of costs included in the 1981 family budgets generally ranged from about 10 to 25 percent higher in Anchorage than in other areas of the country.

Table 4 and Figure 3 show how Anchorage costs at the three standards of living changed relative to

TABLE 3

Federal Taxes as Percentage of Total Family Budgets* at Three Standards of Living, Anchorage and U.S. Average
1981

	U.S.	Anchorage	Relative Tax Burden, Anchorage/U.S.
Low Budget	8.4%	12.7%	1.51
Intermed. Budget	14.1	17.2	1.22
High Budget	20.1	23.4	1.16

*Based on income figures from the Bureau of Labor Statistics' *Urban Family Budgets for Selected Cities,* Autumn 1981. See Table 2 for overall budget figures. In calculating federal taxes that would be due on these incomes, we assumed that all taxpayers would take the standard deduction rather than itemize deductions.

TABLE 4

Ratios of Anchorage/U.S. Average Costs at Three Standards of Living, 1967 and 1981
(U.S. Average = 100)

	Low		Intermediate		High	
	1967	1981	1967	1981	1967	1981
Total budget costs	155	150	141	126	132	119
Food	132	118	126	113	124	110
Housing	198	195	163	142	149	135
Clothing	113	120	111	116	103	108
Medical care	136	160	136	160	136	159
Personal income taxes	248	183	191	124	165	113

Source: U.S. Bureau of Labor Statistics, *Annual Family Budgets for a Four-Person Family at Three Standards of Living,* 1967 and 1981.

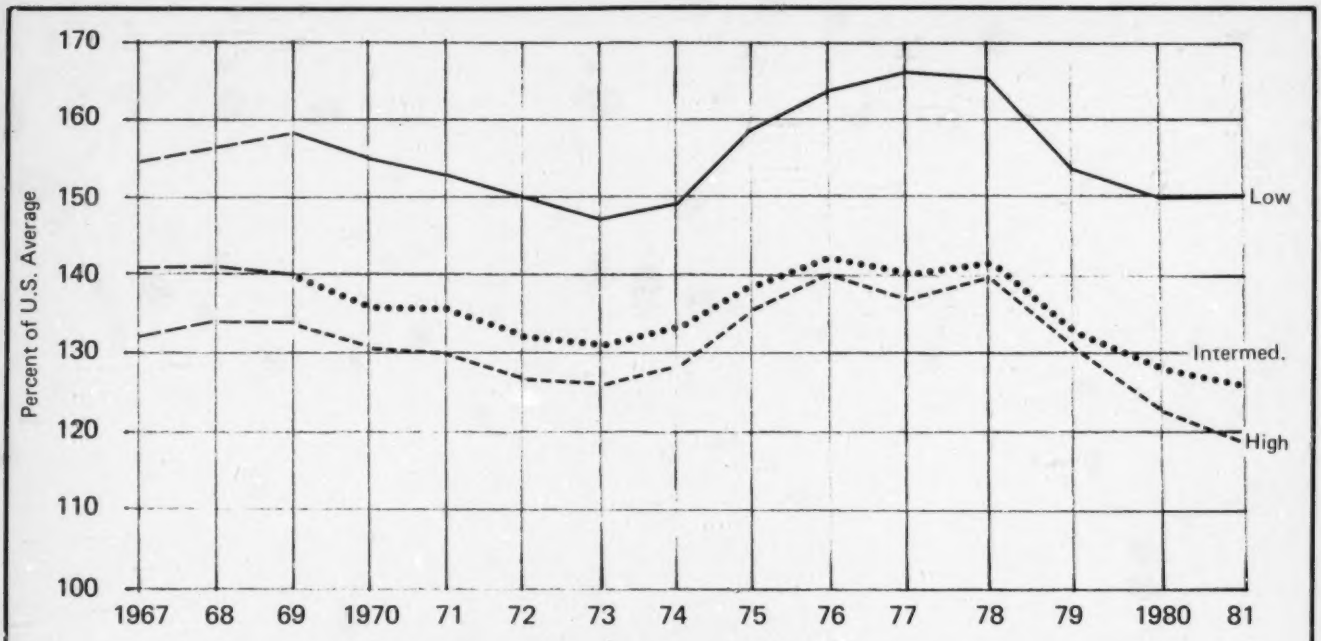

Figure 3. Ratios of Anchorage/U.S. Urban Average Costs of Budgets at Three Levels of Living for a Four-Person Family, 1967-1981
(U.S. Urban Average = 100)

Source: U.S. Bureau of Labor Statistics, "Indexes of Comparative Costs Based on Three Standards of Living for a Four-Person Family," 1967-1981, with the exception of the year 1968, for which no budgets were done. For this figure, probable ratios for 1968 were computed through the use of the Anchorage Consumer Price Index.

U.S. average costs over the life of the budget series.

At the start of the series in 1967, costs for the Anchorage family were 55 percent higher than the national average at the low standard, 41 percent higher at the moderate standard, and 32 percent higher at the high standard. In 1967, as was still true in 1981, costs of housing, medical care, and personal income taxes were among the highest relative costs Anchorage residents faced. But between 1967 and 1981, Anchorage housing at the moderate and high standards became less expensive relative to U.S. average costs. At the same time, however, medical costs at all three standards became more expensive in Anchorage compared to other areas of the country. Personal income taxes, while still much higher, were not nearly as far above U.S. average taxes in 1981 as they had been in 1967; this relative decline was due in part to elimination of the Alaska state income tax in 1980. Food was also relatively less expensive in Anchorage at all three standards by 1981 (see also Table 15).

Figure 3 shows how relative Anchorage-U.S. costs changed year by year from 1967 through 1981. During the late 1960s and early 1970s, life in Anchorage became relatively less expensive at all three standards—as we would expect, since prices (as recorded by the consumer price indexes) were rising faster nationwide than in Anchorage during that period.

Then came the years of pipeline construction, accompanied by high inflation in Anchorage. The trend of the preceding years was reversed in the mid-1970s, as costs of maintaining all three standards of living in Anchorage became higher relative to the U.S. average. But it was at the low standard that the effects were greatest; the figure shows that costs of maintaining a low standard of living in Anchorage soared to about 65 percent above U.S. average costs. This substantial effect at the low standard occurred mainly because rents in Anchorage increased so fast during that period. Prices of houses in Anchorage were also affected by the pipeline boom, but not

as much as rents.

After the pipeline was complete, inflation in Anchorage again fell below the national rate, and once again relative costs at all three standards began to decline. This decline continued through 1981, except at the low standard, where Anchorage costs remained at about 50 percent above U.S. average costs in both 1980 and 1981. One of the main factors that kept the relative costs of the low standard so high was that Anchorage rents in 1980 were still much higher than in other areas—and they increased sharply in the early 1980s.

We don't know how relative costs have changed since the family budget series ended; the Bureau of Labor Statistics has not announced any plans to begin reissuing these budgets that provided the only comprehensive comparison of living costs between any Alaska community and other U.S. places. We do, however, have more current information on prices of some items in Alaska towns and in other U.S. communities; and we present that information in the following sections.

Miscellaneous Prices, Alaska and the U.S.

The following tables show price differences between various items in Alaska and elsewhere in the 1980s. These tables do not tell us how overall living costs vary between, say, Anchorage, and Barrow, but they do show us how much prices differ for specific items around the state.

Transportation Costs.[9] The costs of transporting goods to and within Alaska of course contribute to the state's higher prices. *But the kinds of goods shipped, how and in what quantities they are transported, and where in Alaska they are shipped all influence how much transporation costs add to the final prices of the items.*

About four tons of goods for each Alaskan are shipped from the lower 48 each year. Almost all these goods—as much as 99 percent—come to the state by water, which is the cheapest means of transportation. Port communities in southcentral and southeast Alaska enjoy the state's lowest shipping costs; Anchorage in particular can take advantage of the reduced costs of shipping goods in large quantities.

In ports in western Alaska, several factors drive up prices of goods that arrive by water. Because these ports are generally shallow, goods have to be lightered in—which can add one or two dollars in transport costs for each hundred pounds. Also, towns in western Alaska are small, which means they order in small quantities and cannot take advantage of discounts for larger orders. Finally, the Bering Sea is ice-free only part of the year, but there are year-round costs of maintaining the port facilities.

No scheduled barges serve the farthest north coastal communities, although the petroleum companies operating on the North Slope do take advantage of the brief ice-free period in late summer to transport heavy equipment and supplies by barge.

A large share of goods that arrive in Alaska by water are transported by truck or rail to their final

TABLE 5

Rates for Transporting Goods by Water,[a] Seattle to Selected Alaska Communities, February 1984

	Anchorage	Fairbanks	Kenai
		($ per 100 lbs.)	
Foodstuffs[b]			
45,000 lbs.	$5.73	$8.99	$7.68
900,000 lbs.	5.41	8.67	7.34
Machinery			
20,000 lbs.	19.83	26.99	–
70,000 lbs.	10.34	13.44	–
126,000 lbs.	7.78	11.09	11.37
Dept. Store Merchandise[c]			
17,000 lbs.	18.71	24.63	–
70,000 lbs.	10.03	12.93	12.07
Iron and Steel[d]			
29,000 lbs.	14.80	20.04	17.82
84,000 lbs.	8.20	11.66	9.41
Lumber			
125,000 lbs.	8.50	10.31	10.06
2,000,000 lbs.	3.50	5.12	5.00

[a]Including additional costs of transporting goods from port to final destination when applicable.

[b]Specifically, beverages; costs of transporting other foodstuffs vary.

[c]Includes most kinds of items carried in department stores.

[d]Structural iron and steel.

Sources: Totem Ocean Trailer Express; Pacific Western Lines.

[9]This discussion of transportation costs is based on information from *An Alaska Census of Transportation*, by John T. Gray and J. Phillip Rowe, Institute of Social and Economic Research, March 1982; and additional information provided by John Gray, manager of marketing and sales for the Alaska Railroad.

destinations in southcentral and portions of interior Alaska, but must be flown in to many remote communities.

How much transportation costs add to the final price of goods delivered to the state's largest communities varies greatly among items. They add less to the final price of such small, lightweight items as clothes, than to the price of large, heavy items like construction materials and cars. This is because thousands of blouses, for instance, might weigh the same as one car; in final sales, the transportation costs can be allocated among the many blouses, while the final price of the single car would include all the transportation costs. This is one of the factors that contributed to the relatively higher prices of housing than of clothes or food that we saw in the annual family budgets for Anchorage.

Table 5 shows sample costs of transporting various goods by water from Seattle to Anchorage and added transportation costs to Fairbanks and Kenai. The tariff for transporting one hundred pounds of food is considerably less than for shipping the same weight of lumber or machinery. Also, transportation costs decline significantly when larger quantities are shipped. For instance, if a buyer had ordered 17,000 pounds of department store merchandise shipped from Seattle to Anchorage in early 1984, he would have paid $18.71 for each one hundred pounds. If, however, he had ordered 70,000 pounds, he would have paid only $10.03 per hundred pounds.

TABLE 6

Air Freight and Parcel Post Rates, Anchorage to Selected Alaska Locations March 1984
(per 100 lbs.)

From Anchorage to:	Air Freight	Parcel Post* (4th Class)
Barrow	$46.45	$9.14
Bethel	31.45	7.74
Dillingham	28.55	7.74
Kotzebue	35.00	9.14
Nome	35.00	9.14
Fairbanks	36.00	9.14
Kenai	23.00	7.74
Kodiak	31.00	7.74

*Parcel post (4th Class) rate for 100 pounds packaged in two 50-pound parcels.

Sources: Wien Air Alaska, Alaska Airlines, Alaska Aeronautical Industries, and U.S. Postal Service.

TABLE 7

Round-Trip Air Fares,* Alaska Locations to Seattle, December 1980 and January 1984

From	Jan. 1984	Dec. 1980	Percent Increase
Anchorage	$568	$370	54%
Kenai	574	370	55
Fairbanks	696	475	47
McGrath	688	502	37
Juneau	416	298	40
Ketchikan	328	237	38
Bethel	768	474	62
St. Marys	956	612	56
Dillingham	768	500	54
Cold Bay	840	605	39
Kotzebue	930	644	44
Barrow	982	697	41
Nome	930	644	44

*Coach class or least expensive regular fare; does not reflect any special discount fares such as super-saver fares.

Sources: Wien Air Alaska, Western Airlines, Alaska Airlines.

Lighter goods are often transported by air within Alaska, particularly to the more remote communities. Table 6 shows sample rates for shipping one hundred pounds by air freight or parcel post from Anchorage to other Alaska locations in 1984. The parcel post rate is by far the cheaper in every instance; parcel post is a particular bargain for Alaskans in the farthest north communities. The costs of shipping one hundred pounds by parcel post from Anchorage to other Alaska communities is at most one-third the cost of a similar shipment by air freight, and in some cases as little as 20 percent. For example, residents of Barrow would pay $46.45 to ship one hundred pounds by air freight from Anchorage, but only $9.14 if they used parcel post. Not all kinds of things can be shipped by parcel post—the U.S. Postal Service restricts the weight and dimensions of packages it accepts. Still, a 1981 ISER study estimated that 70 percent of consumer goods that arrive by air in rural Alaska communities (excluding regional centers) come via parcel post.

Alaskans fly more than other Americans. Some Alaska towns can be reached only by air, and most travel outside Alaska is of necessity by air. Table 7 shows the comparative costs in early 1984 for resi-

dents of various Alaska towns to fly to Seattle, the nearest city in the lower 48. It also shows the increase in air fares in the past several years.

Regular round-trip air fares (not including any special fares) from many Alaska communities to Seattle increased from 40 to 60 percent between 1980 and 1984. Residents of southeast Alaska, which is closest to Seattle, pay the lowest fares; Anchorage and other southcentral residents pay the next lowest fares, and those in the western and northern areas the highest. In early 1984, residents of Nome and Kotzebue in northwestern Alaska paid $930 to fly to Seattle and back—which was more than twice as much as Juneau residents would have paid for a similar trip. Alaskans living in Barrow, at the northern tip of the state, paid nearly $1,000 to fly to Seattle and back.

Housing Prices. As previously stated, the Bureau of Labor Statistics' annual family budgets cited housing as one of the most expensive items in Anchorage, relative to U.S. average costs. (Tables 9 through 12 show information on Alaska housing costs from different sources.)

The 1980 census showed that 64.4 percent of houses in America were occupied by owners; in Alaska that proportion was 58.3 percent and in Anchorage 56.5 percent. This lower percentage in Alaska probably reflects both the high price of houses here and the transiency of the state population; many people stay in Alaska for only a short time. Also, Alaska's population is younger than the U.S. average, and younger people in general are less able to afford homes.

Table 8 shows some of the characteristics of houses in Alaska and in the country as a whole at the time of the 1980 census. *Alaska houses in general are newer but more crowded and much more likely to be without plumbing than other U.S. houses.* The table shows that more than half the houses in Alaska in 1980 had been built in the previous 10 years, while in the entire U.S. about one-quarter of all houses had been built between 1970 and 1980. More than 10 percent of houses in Alaska in 1980 lacked plumbing, as compared with about 2 percent nationwide. Roughly 10 percent of Alaska houses were occupied by more than one person per room, as compared with 4.5 percent across the country. Most of the small houses without plumbing are in rural Alaska; in some census divisions in 1980, 75 percent or more of houses had no plumbing. In Anchorage, the percentage is closer to the U.S. average.

TABLE 8

Housing Characteristics, Alaska and U.S. Average, 1980

	% built between 1970-1980	% lacking complete plumbing	% w/more than one person/room
Alaska	52.7%	10.4%	10.1%
Anchorage	55.8	1.4	4.4
U.S.	26.2	2.2	4.5

Source: U.S. Department of Commerce, Bureau of the Census, 1980 census.

TABLE 9

Median Value of Owner-Occupied Houses, Alaska and U.S., 1970 and 1980

	1970	1980	Percent Increase, 1970-1980	1980 Values as Percentage of U.S. Average (U.S. = 100)
Alaska	$23,100	$76,300	+230%	161
Anchorage	32,400	89,200	+175	188
U.S. Average	17,000	47,200	+178	100
U.S. Urban Avg.	18,100	52,200	+188	111

Source: U.S. Department of Commerce, Bureau of the Census, 1980 census.

Table 9 compares the median values of single-family homes in Alaska and the rest of the country in 1980 and shows how much those values changed between 1970 and 1980. *The median value of homes in the U.S. was $47,000 in 1980; in cities, the median value was more than $52,000. In Alaska at this time, the median value of homes was about $76,000, and about $89,000 in Anchorage.*

Table 9 also shows that the median value of houses in Alaska increased 230 percent between 1970 and 1980 as compared with about 178 percent across the country. In Anchorage, however, house values went up only about 175 percent as compared with 188 percent in other U.S. cities.

Table 10 gives us an indication of how house values changed in Anchorage and around the country between 1980 and 1983; this table shows not the value of all existing homes, but rather just the median prices of houses that were actually sold in 1980 and 1983.

Notice that the median value of all U.S. homes in 1980, as reported by owners, was considerably below the median price of houses actually sold that year—while in Anchorage the 1980 figures for all

TABLE 10

Median Price of Houses Sold,[a] Anchorage and U.S., 1980 and 1983

	1980	1983	% Change 1980-83
Anchorage	$89,500[b]	$115,936[b]	+29.5%
U.S.	62,200	70,300	+13.0

[a]These figures are median prices that existing single-family houses (excluding condominiums) sold for in Anchorage and in the U.S. as a whole in 1980 and 1983; they do not necessarily represent values of houses that were not on the market during that period.

[b]Estimated.

Sources: Anchorage Multiple Listing Service; National Association of Realtors.

homes and for houses sold were very close. In Anchorage, houses are generally newer, there is frequent turnover in home ownership, and homeowners are more likely to know the market values of their houses. In the country as a whole in 1980, some homeowners, particularly those who had lived in the same house for a number of years, might not have been aware of the actual market value of their homes and so underestimated them. The substantial difference in the 1980 U.S. figures for all homes and for just houses sold could have also resulted from the high national interest rates that year; since only wealthier Americans could afford to buy houses, the houses sold tended to be more expensive than the average U.S. house.

The median price of houses sold across the U.S. in 1983 was $70,300, as compared with nearly $116,000 in Anchorage. Between 1980 and 1983, house prices went up about 13 percent nationally and nearly 30 percent in Anchorage.

These figures make sense if we remember that the housing market in Anchorage in the early 1980s was much different than in other areas of the country. At the beginning of the 1980s, interest rates on home mortgage loans nationwide were at record highs. These very high mortgage rates priced many Americans out of the market and held down increases in house prices.

At the same time, the Alaska state government was subsidizing mortgage rates. The state made home loans available through the Alaska Housing Finance Corporation at several percentage points below the national rate. And Anchorage's population was growing quickly in the early 1980s—some estimates say by as much as 25 percent in 3 years. This combination of favorable interest rates and a growing population created an active housing market with rapidly rising prices.

But Table 10 only shows the prices houses sold for, not of the overall costs of buying houses in Anchorage and elsewhere. While sales prices in Anchorage are considerably higher, mortgage interest rates are higher elsewhere. An owner's monthly costs are determined not only by the price of the house but the interest rate on the mortgage loan and the size of the down payment. Also, these figures do not take into account possible differences in the quality, size, and other factors of houses sold.

Table 11 shows how median monthly rents in Alaska and other states compared at the time of the 1980 census, and how those rents had changed between 1970 and 1980.

In 1980 the median monthly rent in Alaska was $340 and in the city of Anchorage $360. These figures compare with 1980 median rents of $198 in the U.S. as a whole, and $205 in U.S. cities. Rents rose faster across the country than they did in Alaska between 1970 and 1980; still, in 1980, *rents in Alaska were 70 percent above—and in Anchorage 80 percent above—the national median.* At the time of the census, rents in Anchorage had not changed much in several years. Builders reacted to the apartment shortages of the mid-1970s by building many new apartments in Anchorage; in the economic slowdown that followed pipeline construction, many of those apartments were vacant.

Soon after the census, Anchorage's economy began to pick up again, and many people moved to

TABLE 11

Median Monthly Rents, Alaska and U.S. Average 1970 and 1980

	1970	1980	Percent Increase, 1970-1980	1980 Rents as % of U.S. (U.S. Avg. = 100)
Alaska	$171	$340	+99%	172
Anchorage	199	360	+81	182
U.S. Average	89	198	+122	100
U.S. Urban Avg.	92	205	+123	104

Source: U.S. Department of Commerce, Bureau of the Census, 1980 census.

Anchorage. The apartment vacancy rate dropped quickly and rents went up. Table 12 shows how rents increased in Anchorage and nationally between 1980 and 1983. *During the first three years of the 1980s, rents in Anchorage went up more than 50 percent, as compared with about a 25-percent increase nationwide. The biggest increase in Anchorage was between 1981 and 1982, when rents jumped more than 20 percent.*

So we know that rents in Anchorage were not only far above the national average in 1980, but have since increased much faster than in other areas of the country. These high rents are difficult for the poorer families in Anchorage, most of whom are renters. Many apartments were built in Anchorage in the past few years, and rents in the city had correspondingly stabilized as of early 1984.

Construction Costs. Building in Alaska has always been very expensive; tables 13 and 14 show several indexes of cost differentials for public works and other large construction projects in Alaska and elsewhere.

Table 13 shows regional cost differentials developed by the U.S. Army Corps of Engineers and the Alaska Department of Transportation and Public Facilities. *The Corps of Engineers estimated that large construction projects in Washington, D.C. would cost about half of what they would in Anchorage, while costs in Barrow and in the Aleutian Islands would be double those of Anchorage.* Construction costs in other Alaska communities ranged from 10 to 85 percent above Anchorage costs.

The state Department of Transportation and Public Facilities estimated that large projects cost about the same in Juneau and Fairbanks as in Anchorage, while projects on the North Slope were about three times as expensive as in Anchorage. The department put costs in large western villages at 50 percent above Anchorage costs, but costs in smaller, more isolated western villages at 150 percent above Anchorage's.

Table 14 shows material and labor cost differences for large construction projects in Anchorage, Fairbanks, and other U.S. cities. Developed by private industry, the index in Table 14 uses construction costs in Boston as a base.

Costs of both materials and labor in Anchorage and Fairbanks were rated at 45 percent above costs in Boston in 1984. U.S. cities outside Alaska showed relatively little difference in costs of materials, but a wide difference in costs of labor. For example, material costs in the Table 14 sample varied from a

TABLE 12

Increase in Residential Rent,* Anchorage and U.S. City Average, 1980-1983
(1967 = 100)

	1980	1981	1982	1983	Percent Increase
U.S. Average	191.6	208.2	224.0	236.9	23.6%
Anchorage	158.3	169.1	206.6	239.3	+51.6%

*As measured by the Consumer Price Indexes for the U.S. city average and Anchorage.

TABLE 13

Regional Cost Differentials for Public Works Projects, c. 1980
(Anchorage = 100)

Places	U.S. Department of Defense*	Alaska Department of Transportation & Public Facilities
Washington, D.C.	53	
Anchorage	100	100
Barrow	205	
Barter Island	189	
Bethel		150
Cold Bay	158	
Fairbanks	111	106
Fort Yukon	158	
Juneau	95	102
Kenai Peninsula	111	
Kodiak	132	134
Kotzebue	184	
King Salmon	137	
Nome	184	
Sitka		134
Whittier	100	
Regions		
Aleutian Islands	200	225
Arctic Slope Villages		294
Northern Interior Villages		267
Southcentral Village		132
Southeastern Village		181
Western: Large Village		153
Coastal Village		244

*This index uses Washington, D.C. costs as a base; we have modified it to show Anchorage costs as the base.

Sources: "Assessing the Economic Impacts of Capital Expenditures," ISER Working Paper by Scott Goldsmith and Phillip Rowe, prepared for State of Alaska, Division of Policy Development and Planning, from construction indexes prepared by U.S. Army Corps of Engineers and Alaska Department of Transportation and Public Facilities.

TABLE 14

Cost Differentials for Large Construction Projects* in Anchorage, Fairbanks, and Other U.S. Cities, 1984
(Boston = 100)

	Labor	Materials
Boston	100	100
Anchorage	146	145
Fairbanks	146	145
Washington, D.C.	86	95
Los Angeles	125	103
San Francisco	136	104
Dallas	83	93
Seattle	113	91

*Includes only costs of labor and materials for public works and other heavy construction projects. Excludes costs of land and equipment, and does not necessarily represent cost differentials for smaller construction projects.

Source: *Dodge Manual for Public Works and Heavy Construction*, McGraw-Hill, 1984.

low of 9 percent below Boston costs in Seattle to a high of 4 percent above in San Francisco. Labor costs, on the other hand, varied from 17 percent below Boston costs in Dallas, to a high of 36 percent above in San Francisco.

Table 14 includes just a few U.S. cities, but enough to show the substantial construction cost differences between Alaska cities and other U.S. cities.

Food Costs. Food in Alaska's larger cities costs more than in the country as a whole, although not so much more as housing. But Alaskans living in remote villages in northern and western Alaska commonly pay twice as much or more for similar foods as do residents of Anchorage, Fairbanks, or Juneau.

Using Anchorage costs as a base, Table 15 compares weekly food costs in early 1984 for a family of four in various Alaska places and nationwide. These figures don't show what families actually spend for food, but rather the costs of buying the approximate 100 items included in the federal government's low-cost food plan. These foods are intended to provide adequate nutrition for a family for a week. Some of the items in the plan, expecially fresh fruits and vegetables, are not always available in Alaska towns. Therefore, the University of Alaska's Cooperative Extension Service, which surveys food costs around the state, modifies the plan as necessary for Alaska.

Table 15 shows that in early 1984 the foods included in this plan cost only 2 percent more in Anchorage than in the country as a whole, while in other Alaska communities costs ranged from about 10 to nearly 100 percent above U.S. average costs. Food costs in Anchorage relative to costs in other areas of the country have been declining for several years; growing markets and improved methods of transportation have helped bring down the relative costs of food in Anchorage.

Electric Rates. Electricity is one of the few things that in previous years has actually cost Anchorage residents less than their counterparts in the lower 48. This has been true in part because electricity for Anchorage is generated by natural gas, which in the past has been supplied at fairly low rates under long-term contracts from the nearby Cook Inlet

TABLE 15

Weekly Costs of Food for a Family of Four Under Low-Cost Plan,* Selected Communities, March 1984

	$	Costs as % of U.S. (U.S. = 100)
U.S. Average	$ 78.50	100%
Anchorage	80.46	102
Fairbanks	86.93	111
Juneau	93.97	120
Kenai	88.58	113
Kodiak	108.72	139
McGrath	155.60	198
Bethel	143.11	182
Tok	120.74	154
Nome	136.36	174

*These figures do not represent what families in various communities actually spend for food for a week, but rather what it would cost to buy foods the U.S. Department of Agriculture has determined would provide adequate nutrition for a family with two elementary school children eating at home for a week. The University of Alaska's Cooperative Extension Service, which surveys food costs in selected Alaska communities, modifies the items in the food plan somewhat, since in general, fewer items and fewer kinds of fresh fruit and vegetables are available in Alaska than in other states.

Source: Cooperative Extension Service, University of Alaska and U.S. Department of Agriculture.

gas fields. *But costs of electricity have increased sharply in Anchorage in the past two years; by the end of 1983 they were near the national average.*

Table 16 compares costs of 500 kilowatt hours of electricity in Anchorage and in the country as a whole in 1982 and 1983. In 1982, Anchorage residents paid $29.95 for 500 kilowatt hours of electricity (kwh), or about 80 percent of the national average cost of $37.26. By 1983, however, costs of electricity in Anchorage increased to $35.64 per 500 kwh or about 93 percent of U.S. average costs. And it seems likely that the cost of electricity in Anchorage will rise substantially in the coming years as the long-term contracts expire and costs of Cook Inlet gas rise.

Outside Anchorage, many Alaska communities—particularly the smallest ones— generate electricity with fuel oil. Therefore, electric rates in Alaska's remote villages are vastly higher than the Anchorage and national rates. Table 17 shows that costs of 500 kwh of electricity in a number of Alaska towns in early 1984 varied from $35.64 in Anchorage to $284 in Bettles, above the Arctic Circle.

In many Alaska communities, the state government subsidizes electric rates through its Power Cost Assistance Program. Under that program, the state pays part of the electric bills of utility customers in areas where isolation and other factors make electricity very expensive. In early 1984, the state paid anywhere from half a cent to 30 cents per kwh to various utilities around Alaska; the subsidy applies only up to 600 kwh per customer each month.[10]

Table 17 shows electric costs with and without the program. *In Bettles, where the unsubsidized rate would have been $284 for 500 kwh, the bill was reduced to $137 with state aid. That reduced bill was still nearly four times the Anchorage cost.* In other communities in 1984, the cost of 500 kwh was commonly more than double the Anchorage rate.

Table 18 shows the average monthly consumption of electricity per residential customer in the various regions of Alaska in 1982, the most recent year for which such figures are available. Monthly use of electricity ranged from 955 kwh per customer in southcentral Alaska to 275 kwh in the farthest north regions.

Hospital Costs. Medical help is expensive everywhere in the country, and even more so in Alaska. Analysts cite several possible factors that have contributed to soaring U.S. medical costs in the past decade, including introduction of new and extremely costly equipment; lack of competition in provision of medical services; fee-for-service methods of payment to doctors; and lack of incentive for many Americans to try to hold down their medical costs, since most costs are covered by private insurance or government programs. Alaska's high medical costs are also due at least in part to the same kinds of things that increase other state costs—including smaller markets, transportation costs, and high construction costs.

TABLE 16

Residential Electric Rates, Anchorage and U.S. Average, 1982, 1983

	1982 (500 kwh)		1983	
		Anchorage as % of U.S. Average		Anchorage as % of U.S. Average
U.S. Average	$37.26	100	$38.45*	100
Anchorage	29.95	81	35.64	93

*Estimated, based on the 3.2 percent increase in residential electric rates recorded in the U.S. city average consumer price index for all urban consumers, annual average, between 1982 and 1983.

Table 19 compares the costs of hospital stays in Alaska and other states. These figures include charges for rooms and other hospital services. *In 1982—the most recent year for which figures are available—hospital patients in Alaska paid an average $530 per day, compared with $393 nationally.* But although Alaska's hospitals were among the most expensive in 1982, others were even more so in the District of Columbia, California, and—the most expensive—Nevada, where hospital patients paid about $680 daily.

The least expensive states in which to be hospitalized in 1982 were Montana, North Dakota, and South Dakota, where daily charges totaled about $250.

Between 1972 and 1982, the costs of staying in hospitals increased dramatically in all states—nearly 300 percent nationwide and 270 percent in Alaska. The largest increase occurred in Nevada, where hospital costs rose more than 450 percent.

So although hospital charges in Alaska remained among the highest in 1982, they did not increase as fast during the past decade as they did in other states. The Anchorage consumer price index and the annual family budgets both show, however, that overall

[10] The 1984 Alaska Legislature revised this program, so that in the future state subsidies will be used to make power costs around the state equal or close to the mean of the cost per kilowatt hour in Anchorage, Fairbanks, and Juneau.

TABLE 17

Costs of 500 Kilowatt Hours of Electricity, Selected Alaska Communities, March 1984

	Electric Bill,[a] 500 KWH	Power Cost Assistance[b] (cents/KWH)	Electric Bill, 500 KWH, with Power Cost Assistance	Adjusted Costs as Percentage of Anchorage (Anch. = 100)
Anchorage	35.64	(None)	–	100
Juneau	39.95	(None)	–	112
Fairbanks	70.80	(None)	–	199
Homer	49.02	(None)	–	138
Ft. Yukon	177.90	18.6	84.90	238
Bethel	96.99	2.38	85.09	239
AVEC Villages[c]	240.70	23.69	122.25	343
Barrow	66.00	(None)	–	185
Bettles	284.00	29.45	136.75	384
Valdez	80.30	(None)	–	225
Glennallen	99.80	(None)	–	280
Egegik	215.15	27.58	77.25	217
Kotzebue	123.95	8.27	82.60	232

[a]Includes, where applicable, monthly customer charges and surcharges.

[b]The Power Cost Assistance Program is administered by the Alaska Public Utilities Commission. The program pays a portion of the costs per kilowatt hour of electricity—up to 600 kilowatt hours per month—for customers of regulated utilities which have very high rates because of geographic isolation or other factors. In early 1984 the program paid from 0.359 cents to 29.45 cents per kilowatt hour to qualified utilities around the state.

[c]Includes a number of villages in southwest Alaska.

Source: Alaska Public Utilities Commission, "Electric Rate Schedule," March 1984.

medical costs in Anchorage increased as fast or faster than the national rate over most of the past decade and a half.

Alaska Living Cost Differences

The most troublesome thing about comparing living costs among Alaska towns—aside from the difficulties of getting cost information in small, remote places—is that there is no real comparison between life in urban and rural Alaska. Urban Alaskans can live in more or less the same kinds of houses, buy most of the same foods, and enjoy services similar to those available elsewhere in the country. Many rural Alaskans, by contrast, live in small, crowded houses—often without plumbing—and have limited access to the kinds of things most Americans take for granted. Many live where they do mainly because remote Alaska places are so different from the ordinary American town. Also, unlike most of their urban neighbors, many rural Alaskans hunt and fish for much of their food.

Cost indexes generally compare the costs of the same or similar items in various communities. Many items are not available at all in rural Alaska, and urban and rural Alaskans have different opinions about what they need to maintain a good standard of living. So anyone attempting to compare living costs around Alaska faces substantial difficulties in deciding how to measure those costs.

The state government and the University of Alaska both recognize differences in living costs around the state by paying different wages for the same jobs in various regions. Several state agencies also recognize cost differences in calculating payments under state programs. Within the past 10 years or so, the state has made several studies of living costs around Alaska, the most comprehensive in 1972.[11]

[11]State of Alaska, Department of Administration, Division of Personnel, *Survey of Housing and Food Costs*, December 1972.

TABLE 18

Average Monthly Residential Use of Electricity, Regions of Alaska, 1982
(in kilowatt hours)

Southeast Alaska	796
Small villages	374
Juneau	932
Southcentral Alaska	955
Anchorage	978
Homer	1,066
Glennallen	398
Valdez	581
Interior Alaska	706
Fairbanks	775
Ft. Yukon	158
Bettles	196
Arctic/Northwest	275
Barrow	460
Kotzebue	463
Small villages	196
Southwest	421
Bethel	425
Egegik	264

Source: U.S. Department of Energy, Alaska Power Administration, *Alaska Electric Power Statistics*, 1960-1982, August 1983.

In a number of cases, the studies substantially disagreed about cost differences among Alaska communities. A 1981 study done for the University of Alaska reported, for instance, that previous studies had estimated living costs in Bethel at anywhere from 1 to 55 percent above Anchorage costs.[12] Part of this disparity has been due to the different ways in which the various studies defined and measured living costs.

Table 20 shows the range of salary differentials currently paid by the state government and the University of Alaska. Anchorage is used as the base for the salary schedule in both cases, but beyond Anchorage the two scales often disagree. The state pays employees in Palmer 3.6 percent more than Anchorage workers, while the university pays its employees the same in both places. In Kodiak, the state pays 7 percent more than in Anchorage, while the university pays Kodiak workers 15 percent more. State workers in Fairbanks are paid 15 percent more than Anchorage workers for the same jobs, while the university pays its Fairbanks employees 10 percent more. State and university jobs in Barrow pay the highest differential above Anchorage: about 37 percent more and 40 percent more, respectively.

The state government is now preparing to undertake a new study of living costs around the state, with the results to be used to update its salary differentials.

Alaska and U.S. Incomes

Alaska is known for its high wages—and many Alaskans certainly do earn more than the average American. But incomes of all Alaskans are affected by the state's high prices, and in any case, incomes are not universally high in Alaska. Earnings vary greatly among various kinds of households, in different regions of the state, and among occupations.[13]

[12]Homan-McDowell, *A Study of Area Differentials for Alaska Community College Locations*. Prepared for the Legislative Budget and Audit Committee, April 30, 1981.

[13]These income figures include only cash received by households and individuals; there are a number of nonmonetary benefits and services that have cash value but are not considered income. These would include, for instance, the reduced electric bills made possible for rural Alaskans under the state's Power Cost Assistance program.

TABLE 19

Daily Per Patient Revenue[a] in Community[b] Hospitals, U.S. Average and Selected States, 1972 and 1982

	1972	1982	Percent Increase, 1972-1982	1982 Costs as % of U.S. Average
U.S. Average	$99.97	$393.11	293%	100
States with Highest Costs				
Alaska	$144.24	$530.18	268%	135%
California	128.88	621.14	382	158
Dist. of Columbia	111.38	572.84	405	143
Nevada	121.81	680.52	459	173
States with Lowest Costs				
S. Dakota	$69.61	$252.54	262%	64%
N. Dakota	80.13	265.13	231	67
Montana	73.99	258.96	250	66
Mississippi	71.16	281.04	295	71

[a]Includes revenues hospitals collect not only from room charges but for other services they provide to patients.

[b]Excludes federal hospitals.

Source: American Hospital Association, *Hospital Statistics*, 1983 edition.

TABLE 20

State and University of Alaska, Regional Pay Differentials, 1984
(Anchorage = 100)

	State[a]	University[b]
Anchorage, Juneau, Ketchikan	100	100
Palmer	103.6	100
Petersburg, Sitka	103.6	105
Kodiak	107.3	115
Fairbanks	114.9	110
Aleutian Islands	128.1	130
Barrow	137.1	140

[a]Pay differentials at entry level for a range 15 job. The State of Alaska classifies jobs by "ranges," with most jobs falling between ranges 5 and 27. Many clerical jobs begin around range 5, and professional and technical jobs at higher ranges. Pay differentials for jobs at different ranges vary slightly.

[b]Includes not only communities where there are university and community college campuses, but also any communities in which the university holds classes or conducts other activities.

Sources: Alaska Department of Administration, Division of Personnel; University of Alaska.

Household and Family Incomes

Table 21 compares median household incomes in Alaska and the entire U.S. at the time of the 1980 census. *For 1979, households in Alaska reported a median income of $25,282—about 50 percent more than the national median of $16,841.* But Alaska incomes varied greatly. The median income of homeowners in 1979 was $32,561—much higher than the state median and nearly double the national figure. In contrast, the median household income of renters was only $17,491, just slightly above the U.S. median. And the 1979 median income of Alaska households headed by women with children was only $11,255—less than half the state median and only 67 percent of the national figure.

Table 22 shows that large variations in household incomes also exist in different areas of the state. The areas with the highest and lowest household incomes at the time of the census were both in rural southwest Alaska: the highest was in the Bristol Bay region, at 36 percent above the state median; the lowest was in the nearby Wade Hampton areas, at 55 percent below the state figure.

The Bristol Bay and the North Slope divisions are the exceptions to the general pattern of low household incomes in rural Alaska. In a good season, local fishermen who take salmon from the rich Bristol Bay fishery earn good incomes; on the North Slope, the local government has been able to use its huge Prudhoe Bay tax base to create many well-paid local jobs. Elsewhere in rural Alaska, tax bases are small, jobs are few, and incomes are generally low.

In urban Alaska in 1979, household incomes were generally at or near the state median. In the Anchorage, Sitka, Ketchikan, Valdez-Cordova, and Juneau division, incomes were above the state median, with the highest in Juneau at 23 percent above the Alaska median. In the Fairbanks, Kenai Peninsula, and Wrangell-Petersburg areas, household incomes were slightly below the state median.

Table 23 provides another measure of the income differences around the state—the percentages of Alaska families with incomes below the federal poverty line at the time of the census. *The 1980 census found 9.6 percent of American families to be poor by federal standards.* In Alaska, 8.6 percent of families were ranked as poor by those same national standards. But the federal government recognized that living costs were higher in Alaska, as well as in Hawaii, and therefore set poverty levels for these two states at 25 percent above those for the rest of the country. *Nearly 12 percent of Alaska families had incomes at or below 125 percent of the federal poverty level in 1979.*

As discussed earlier, many costs in Alaska—

TABLE 21

Median Household Income, Alaska and U.S., 1979

		Percent of U.S. Average (U.S. = 100)
U.S. Average	$16,841	100%
Alaska	25,282	150
Owner-occupied households	32,561	193
Renter-occupied households	17,491	104
Households headed by women with children under 18	11,255	67

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census.

TABLE 22

Median Household Income, Alaska Census Areas, 1979

		Percentage of State Median
Alaska	$25,282	100%
Aleutian Islands	20,234	80
Anchorage	27,350	108
Bethel	13,904	55
Bristol Bay	34,429	136
Dillingham	18,684	74
Fairbanks	23,377	93
Haines	21,397	85
Juneau	31,019	123
Kenai Peninsula	23,695	94
Ketchikan Gateway	26,470	105
Kobuk	17,625	70
Kodiak Island	26,164	103
Matanuska Susitna	22,927	91
Nome	14,688	58
North Slope	31,023	123
Prince of Wales	21,699	86
Sitka	30,823	122
Skagway-Yakutat-Angoon	20,436	81
Southeast Fairbanks	14,455	57
Valdez-Cordova	28,360	112
Wade Hampton	11,493	45
Wrangell-Petersburg	24,395	96
Yukon-Koyukuk	12,020	48

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census.

particularly in rural areas—are substantially more than 25 percent above U.S. averages. Therefore, the last column of Table 23 shows how many Alaska families would have been considered poor in 1979, if we increase the national figures by 50 percent to more accurately reflect the state's higher costs. *More than 18 percent of Alaska families had incomes at or below 150 percent of the federal poverty level in 1979.*

Looking at the census divisions around Alaska, we see that even with *no* adjustment in the federal poverty figures, one-quarter or more of families in some areas had incomes low enough to rank them as poor. These census divisions were the Bethel, Dillingham, Wade Hampton divisions in southwest Alaska; and the Nome, Kobuk, and Yukon-Koyukuk divisions in northwest and interior Alaska.

If we increase the poverty levels to 125 percent of the national figure, we see that in the poorest regions of the state one-third or more of all families would have been considered poor in 1979. And when we increase the poverty standard to 150 percent of the national level, nearly half the families in a few census divisions would have been poor that year. In most urban areas of the state, the percentages of families considered poor in 1979 were near the national average, even with adjustments for Alaska's higher costs.

Per Capita Incomes

The previous tables showed household incomes as reported by Alaskans during the 1980 census.

TABLE 23

Families with Incomes Below the Poverty Level,* U.S. and Alaska Census Divisions, 1979
(Percentages)

	100% of Poverty Level	125% of Poverty Level	150% of Poverty Level
U.S.	9.6%	N/A	N/A
Alaska	8.6	11.7	18.2
Aleutian Islands	9.6	11.7	20.0
Anchorage	6.1	8.5	13.3
Bethel	28.3	36.2	47.8
Bristol Bay Borough	–	2.3	6.1
Dillingham	24.2	29.3	32.3
Fairbanks	8.1	11.9	18.7
Haines	10.0	12.3	21.9
Juneau	3.3	4.5	7.4
Kenai Peninsula	8.8	12.8	19.0
Ketchikan Gateway	5.6	6.8	11.8
Kobuk	24.5	31.3	42.9
Kodiak Island	7.5	10.7	17.5
Matanuska-Susitna	11.0	12.3	18.7
Nome	25.0	31.2	41.7
North Slope	10.8	13.2	16.6
Prince of Wales	10.8	13.8	18.2
Sitka	4.3	5.9	8.7
Skagway-Yakutat-Angoon	10.0	17.2	24.2
Southeast Fairbanks	13.6	22.9	31.8
Valdez-Cordova	7.9	11.6	19.4
Wade Hampton	36.3	45.6	60.7
Wrangell-Petersburg	5.4	7.3	11.5
Yukon-Koyukuk	25.8	34.1	44.9

*The poverty level for families and individuals is established each year by the federal government; the figures for Alaska and Hawaii are set 25 percent higher than those for other states.

Source: U.S. Department of Commerce, Bureau of the Census, 1980 census.

Tables 23 and 24 and Figure 4 show a different measure of personal income—per capita personal income. The federal Bureau of Economic Analysis arrives at these figures by totalling all personal income Alaskans receive annually, and dividing by the current population. Obviously the accuracy of these figures depends on the accuracy of the population figures. Some Alaskans believe the bureau may have overestimated the state's per capita income at times, particularly during construction of the trans-Alaska pipeline in the mid-1970s. This overestimation could have happened if the bureau credited to Alaskans some income that was actually earned by the many nonresidents who worked on the pipeline project.[14]

Table 24 shows 1982 per capita income figures for Alaska census divisions—the most recent census division breakdowns available in early 1984. These figures show, as did the earlier household income figures from the census, large differences in income around the state.

In 1982, the average U.S. per capita income was $11,100, while in Alaska the figure was $16,598—about 50 percent higher. Per capita incomes around the state that year varied from a high of more than $21,000 on the North Slope, to a low of less than $6,000 in the Wade Hampton division.

Per capita incomes increased substantially in Alaska between 1981 and 1982, due partly to the fact that the state government in 1982 issued checks for $1,000 to everyone who had lived in the state at least six months.[15] At the same time in the rest of the country, the national recession held down growth in income.

Even with the jump in Alaska per capita incomes in 1982, one-quarter of the 29 areas reported in Table 24 had incomes below the national average in 1982—and this with no adjustment for Alaska's higher costs.

Table 25, which does take those higher costs into account, offers three comparisons of Alaska and U.S. per capita income. The first is a straightforward comparison of per capita incomes from 1972 through 1983. Income in Alaska during those years was higher than the national average. The smallest difference occurred in 1972, when Alaska's per capita income was only 17 percent above the national average. The greatest margin occurred in 1976, the height of pipeline construction, when the Alaska figure reached 68 percent above the U.S. average. The gap between incomes in Alaska and other states narrowed in the later 1970s, with Alaska's per capita income falling to about 30 percent above the national average by 1979.

The margin widened again in the 1980s, as state spending of its huge oil revenues spurred economic growth in Alaska. At the same time, the national

TABLE 24

Per Capita Personal Income, Alaska Census Divisions* and U.S. Average, 1982

	Per Capita Incomes	Incomes as Percent of U.S. Average (U.S. = 100)
U.S. Average	$11,100	100%
Alaska	16,598	150
Aleutian Islands	12,637	114
Anchorage	18,429	166
Angoon	6,996	63
Barrow-North Slope	21,387	193
Bethel	8,938	81
Bristol Bay Borough	14,647	132
Bristol Bay	9,836	89
Cordova/McCarthy	14,236	128
Fairbanks	18,381	166
Haines	12,377	112
Juneau	19,889	179
Kenai/Cook Inlet	13,394	121
Ketchikan	17,365	156
Kobuk	10,416	94
Kodiak	15,770	142
Kuskokwim	7,218	65
Matanuska-Susitna	13,874	125
Nome	10,627	96
Outer Ketchikan	12,145	109
Prince of Wales	13,504	122
Seward	15,289	138
Sitka	14,746	133
Skagway-Yakutat	12,080	109
Southeast Fairbanks	11,193	101
Upper Yukon	15,954	144
Valdez/Chitina/Whittier	16,243	146
Wade Hampton	5,787	52
Wrangell-Petersburg	14,056	127
Yukon-Koyukuk	15,937	144

*Census division as they existed before the 1980 census; in 1980 the number of census divisions in Alaska was reduced from 29 to 23.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

[14]The Bureau of Economic Analysis does attempt to exclude income earned by nonresidents working in Alaska, but some economists believe the bureau's exclusion method may not be accurate.

[15]These were payments under the state's permanent fund distribution plan, which since 1982 has annually paid individual Alaskans a portion of the interest from the state's Permanent Fund; this fund is made up of a percentage of the state's oil revenues.

TABLE 25

Per Capita Personal Income, Alaska and the United States, Selected Years, 1972-1982

	1972	1976	1977	1978	1979	1980	1981	1982	1983
Per Capita Income (Current $)									
Alaska	$5,285	$10,725	$10,968	$10,957	$11,344	$12,916	$14,904	$16,598	$16,820
United States	4,515	6,367	6,984	7,776	8,657	9,503	10,582	11,100	11,675
Per Capita Disposable[a] Income									
Alaska	$4,383	$8,705	$8,904	$9,039	$9,136	$10,665	$12,142	$13,312	N/A
United States	3,846	5,468	5,957	6,615	7,320	8,025	8,897	9,375	N/A
Real[b] Per Capita Disposable Income (1967 base)									
Alaska	$2,539	$3,480	$3,316	$3,232	$2,994	$3,160	$3,346	$3,631	N/A
United States	3,069	3,207	3,282	3,387	3,362	3,249	3,267	3,248	N/A

[a]Per capita income minus federal, state and local income-related taxes and other personal taxes and payments.

[b]Disposable income, adjusted to eliminate effects of inflation in both Alaska and the U.S. as a whole and to reflect Alaska's higher living costs. The base year for both adjustments is 1967. Income figures for Alaska are first deflated by 41 percent, which was the 1967 difference in the cost of maintaining an intermediate standard of living for a family of four in Anchorage as compared with the U.S. average, as reported in the Bureau of Labor Statistics' 1967 *Urban Family Budgets*. Figures for Alaska are also deflated by increases in the Anchorage Consumer Price Index, and figures for the U.S. are deflated by increases in the U.S. average CPI.

Source: ISER MAP data base.

recession held down growth in personal income in the U.S. as a whole.

In 1982, Alaska's per capita income climbed to about 50 percent above the national average; the difference in 1983 was somewhat smaller, with *Alaska's per capita income at $16,820, about 44 percent above the national average of $11,675. Per capita incomes in Alaska changed little between 1982 and 1983.*

The second set of numbers in Table 25 shows disposable per capita income in Alaska and the U.S. over the past decade. Disposable income is what taxpayers actually have to spend, after paying their income and other personal taxes. Incomes of all Americans are of course reduced by taxes, but incomes of Alaskans are reduced more than those of other Americans because Alaskans pay disproportionately high federal income taxes (see Table 3). So, for example, while Alaska's total per capita income was 17 percent above the national average in 1972, its disposable income was just 13 percent above the U.S. average. In 1982, total per capita income in Alaska was 50 percent above the national average, but the state's disposable income was about 42 percent higher than disposable income in the country as a whole.

The third set of numbers in this table is disposable income adjusted for both inflation and Alaska's higher costs.[16] These figures are intended to compare the buying power of Alaskans with that of other Americans over the past decade, when taxes, inflation, and living costs are taken into account. *Real disposable incomes of Alaskans were actually lower than those of other Americans in a number of years from 1972 through 1983.* In 1976 and 1977, real disposable income of Alaskans was above the national average, but it again dropped below at the end of the decade. In 1981 and 1982, real income of Alaskans once more rose above the national average, but the differences were modest as compared with the differences in the unadjusted incomes. *We calculated real disposable income of Alaskans at about 12 percent above the national average in 1982.*

[16]See note b, Table 25.

Figure 4 shows the annual rate of change from 1967 through 1982 in the real disposable incomes discussed above. Alaska's up-and-down economy is apparent in this figure—the year-to-year changes in income in Alaska are much more dramatic than in the country as a whole. *The highest annual increase in Alaska during that period took place between 1975 and 1976—the years of pipeline construction—when real disposable income jumped almost 15 percent. The greatest loss in Alaska was between 1978 and 1979—after pipeline construction ended—when real disposable income dropped about 7 percent.*

The greatest annual gain in the entire nation during that period took place between 1972 and 1973, when growth in disposable income exceeded inflation by 5 percent. The biggest loss occurred between 1979 and 1980—a period of very high inflation—when Americans lost more than 3 percent in buying power.

The annual figures for the early 1980s clearly show the differences in the economies of Alaska and the rest of the nation. State spending of huge oil revenues in Alaska boosted economic activity and personal incomes, while the country as a whole saw a serious recession.

Earnings by Occupation. In Alaska, as in other states, large differences exist in the kinds of jobs men and women hold, and in what they are paid for those jobs.

Table 26 shows percentages of men and women in various occupations in Alaska and in the entire U.S. at the time of the 1980 census. *By far the largest share of Alaska's working women—nearly 40 percent—held administrative support jobs in 1980; these included jobs as secretaries, typists, and clerks. Among Alaska men who held jobs in 1980, two types of occupations were equally common—about 20 percent worked in executive and managerial occupations, while another 20 percent worked in production, crafts, and repair occupations; these included jobs as mechanics and oilfield and construction workers.*

Nearly 20 percent of women who worked in Alaska in 1980 held jobs in the executive and managerial occupations; another 13 percent worked in various special professions (including law and teaching). About 10 percent worked in sales jobs and another 11 percent in service jobs. Relatively few Alaska women worked in other occupations.

About 15 percent of men who worked in Alaska in 1980 were in special professions, and another 12 percent worked as laborers, heavy equipment operators, or in related occupations. Other employed men were spread fairly evenly among the remaining occupations listed in Table 26, but with the smallest proportion working as farmers, loggers, and fishermen.

TABLE 26

Occupations of Alaska and U.S. Workers, 1979
(Percentage Distribution)

	Women		Men	
All Workers*	Ak. 100%	U.S. 100%	Ak. 100%	U.S. 100%
Exec., Admin., Mgrl. Occup.	18.8%	7.4%	20.0%	12.7
Professional Specialty Occup.	13.1	14.1	15.3	10.9
Technicians & Related Support Occup.	3.2	3.1	6.2	3.0
Sales Occupations	9.4	11.3	8.1	9.1
Administrative Support Occup.	39.4	31.2	7.2	7.0
Service Occupations	11.2	18.0	8.7	9.3
Farming, Forestry, Fishing	0.5	0.9	2.3	4.3
Precision Production, Craft, & Repair Occupations	1.8	2.4	20.0	20.7
Operators, Fabricators, Laborers	2.6	11.5	12.0	22.9

*Numbers may not add to 100 because of rounding.

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census, *Detailed Population Characteristics*, Alaska.

The biggest differences among occupations of Alaska women and all U.S. women in 1980 were that a much larger percentage of Alaska women worked as managers and executives than was true nationwide; and a much smaller percentage of women in Alaska worked as operators or fabricators.

Alaska women appear to have been more successful than women across the country in getting executive and managerial jobs; also, the high proportions of Alaska women working in such jobs and in administrative support jobs probably indicates the large proportion of government office jobs in Alaska. Most female operators and fabricators in the U.S. in 1980 likely worked in various kinds of manufacturing, whereas Alaska has little manufacturing.

The biggest differences in occupations of Alaska men and all U.S. men were that more Alaskans worked in executive and managerial jobs, and fewer worked as operators or fabricators. Again, as with women, these differences probably indicate the large number of government jobs in Alaska, and the lack of manufacturing jobs. Also, substantially more Alaska men worked in law, teaching, medicine, and other professions than was true nationwide.

Table 27 shows 1979 median earnings by occupation of men and women in Alaska and in the western region of the U.S.; comparable figures for all U.S. workers were not available as of this writing. Although these figures are now several years old, the

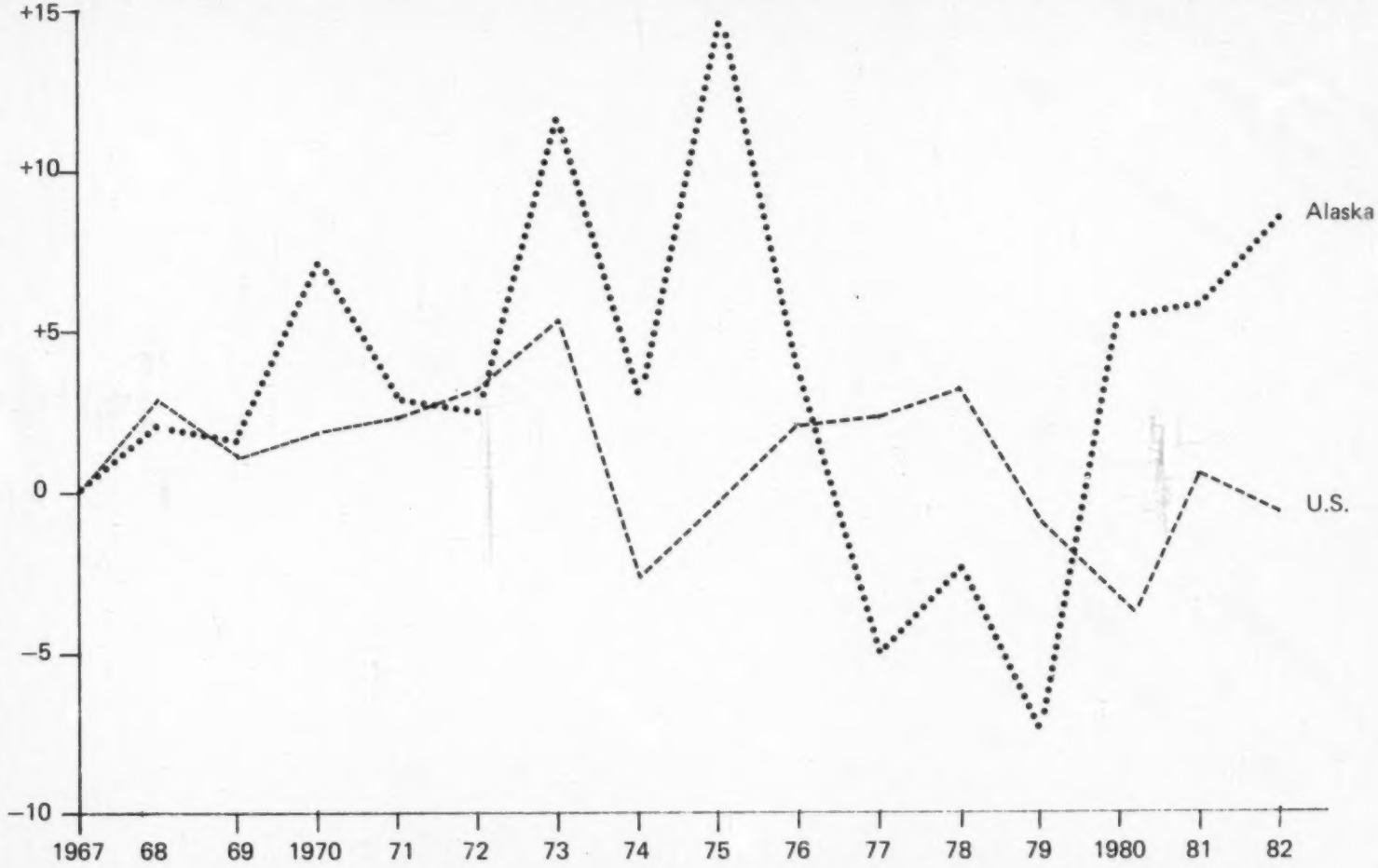

Figure 4. Annual Rates of Increase, Real Disposable Income (per Capita),* Alaska and U.S., 1967-1982

*Disposable personal income is personal income minus federal, state, and local income-related taxes and other personal taxes and payments. Real disposable income is disposable income, adjusted to eliminate effects of inflation in both Alaska and the U.S. as a whole and to reflect Alaska's higher living costs. The base year for both adjustments is 1967. Income figures for Alaska are first deflated by 41 percent, which was the 1967 difference in the cost of maintaining an intermediate standard of living for a family of four in Anchorage as compared with the U.S. average, as reported in the Bureau of Labor Statistics' 1967 *Urban Family Budget*. Figures for Alaska are also deflated by increases in the Anchorage Consumer Price Index, and figures for the U.S. are deflated by increases in the U.S. average CPI.

Source: ISER MAP data base.

TABLE 27

Median Annual Earnings for Selected Occupations, Alaska and Western U.S. 1979

	Women		Men		Women's Incomes as Percentage of Men's	
	Alaska	Western U.S.	Alaska	Western U.S.	Alaska	Western U.S.
All Occupations	$16,057	$11,106	$27,897	$18,542	58%	60%
Executive, Administrative, Managerial	18,935	13,429	31,981	23,503	59	57
Professional Specialty Occupations	20,406	15,257	30,200	23,394	68	65
Engineers, architects, surveyors	20,301	17,081	34,040	25,550	60	67
Computer system analysts	31,139	18,046	31,692	23,687	98	76
Physicians	42,254	23,955	51,607	54,327	82	44
Registered Nurses	19,654	15,922	18,879	17,042	104	93
Teachers						
Postsecondary	27,516	17,258	32,499	25,154	85	69
High School	22,291	15,306	25,480	18,909	87	81
Elementary	21,153	14,495	24,692	17,983	86	81
Social & Recreation workers	22,371	14,124	24,070	17,079	93	83
Religious workers	9,692	8,472	14,135	12,854	69	66
Lawyers & Judges	25,496	18,467	44,755	32,186	57	57
Technicians & Related Support Occupations	17,477	12,644	29,090	19,087	60	66
Computer programmers	29,300	16,083	25,692	20,869	114	77
Airplane pilots & navigators	*	15,133	31,489	30,365	–	50
Sales Occupations	13,338	10,182	23,918	18,957	56	54
Sales Clerks	12,066	8,727	20,723	15,080	58	58
Administrative Support Occupations	15,503	10,879	23,461	16,619	66	65
Secretaries, stenos, typists	15,622	10,910	19,099	13,213	82	83
Bank tellers	11,548	8,734	14,486	9,570	80	91
Service Occupations	12,926	7,864	22,698	12,918	57	61
Police & Detectives (public)	28,866	14,084	33,377	20,437	86	69
Waiters	8,962	7,481	18,746	9,038	48	83
Barbers & Hairdressers	11,933	8,856	20,099	11,998	59	74
Farming, Forestry, Fishing Occupations	7,714	7,117	22,765	11,564	34	62
Farming (not managerial)	2,273	7,344	7,844	9,889	29	74
Forestry & Fishing	9,889	10,313	25,000	17,603	40	59
Precision Production, Craft, & Repair Occup.	15,133	11,376	29,888	18,626	51	61
Mechanics	21,792	14,625	28,626	17,645	76	83
Construction Trades	10,429	12,348	29,347	19,001	36	65
Extractive Occupations	*	16,386	37,061	21,478	–	76
Operators, Fabricators, Laborers	13,759	9,338	25,428	15,920	54	59
Machine Operators & Inspectors	13,080	9,179	25,415	15,514	52	59
Bus Drivers	18,321	10,678	18,490	16,898	99	63
Heavy Equipment Operators		10,143	32,163	17,846	–	57

*Very few women in these occupations.

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census, *Detailed Population Characteristics*, Alaska, and United States Summary, Section B: Regions.

census bureau just recently published them, and they do show the differences in men's and women's earnings by occupation, and in earnings of Alaskans and other Americans in western states. What stands out most in the table is that women in virtually all occupations earn less than men. Women earn less for a number of reasons. There is still some sex discrimination in pay, although such discrimination is illegal; women have historically been paid less than men. Also, most women workers hold low-paying jobs, particularly clerical jobs. Women, who have only recently been able to move into certain high-paying occupations, have not held those jobs as long on the average as men. The table also shows:

- Working women in Alaska earned 58 cents for every dollar Alaska men earned in 1979. Women in other western states took home about 60 cents for every dollar earned by men in their region.
- Median men's earnings in Alaska that year were $27,897, compared with $16,057 for Alaska women.
- The highest- and the lowest-paying occupations were similar in both Alaska and other western states, but Alaskans usually earned more.
- Alaska men earned about 50 percent more than men in other western states in 1979, while Alaska women earned 45 percent more than their western counterparts .
- Physicians, lawyers, and judges were among the best paid Alaska men and women in 1979, although the women earned less.
- In both Alaska and other western states, bank tellers, religious workers, and farmers were among the lowest-paid workers.

Conclusions

Over the past 15 years, Anchorage residents have enjoyed the cost savings that come with a growing population, bigger markets, and improved methods of transportation. The Anchorage family budgets over that period showed generally declining costs at the high and moderate standards of living, relative to U.S. averages—but in 1981, costs for low-income families in Anchorage remained just about as high above U.S. average costs as in 1967. And since the last budgets were issued in 1981, rents—the most expensive item for poorer families—have increased more than 50 percent in Anchorage. So it seems likely that Anchorage's high costs are still, as they always have been, hardest on poor families.

In no other state do internal price differences come even close to being as large as they are in Alaska. We know little about how price changes in the past decade affected overall costs in small, remote Alaska places. We do know, however, that prices of food, electricity, and other items remain in many cases twice as high as Anchorage prices.

Alaska's economy is much more volatile than that of the U.S. as a whole, moving up and down very quickly. Different forces often affect inflation in Alaska. For instance, the economic boom accompanying construction of the trans-Alaska pipeline in the mid-1970s, caused prices in Anchorage to increase much faster than the national average—and the inflation rate in the city quickly fell below the national average at the end of the decade, as economic activity in the state dropped off sharply. In the past several years, the state government has used much of its large Prudhoe Bay oil revenues to fuel economic activity in the state, while throughout much of that period Americans nationwide faced a serious recession. In 1983 and early 1984, prices in Anchorage moved up faster than the national rate for the first time since the mid-1970s.

The state government and private companies recognize cost differences around Alaska by paying different wages in different locations. Payments under various government programs are also adjusted for regional cost differences. But there is no general agreement about what those cost differences are.

Alaska's immense size, vast urban-rural differences, and the nature of its economy make it important for the state to have reliable gauges of how Alaska costs are changing relative to those in other states and within Alaska itself.

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